

STRATEGIC ELEMENTS FOR HEALTH, RESEARCH AND EDUCATION
SUMMARY

1. National Academy of Health--analogous to the National Academy of Sciences--
 - To recognize and honor the significant achievements of leaders in health research, teaching, care and administration
 - To institutionalize the most creative talents and socially responsible motivations in American Medicine
 - To insure a continuing body of recognized integrity, responsibility of purpose, and breadth of competence for advice to the executive and the public on questions affecting health
 - To give continued re-evaluation on existing programs, and of role and effectiveness of the contemporary physician
2. The most critical needs in health education and research
 - A. Federal support of merit scholarships for medical students, with full maintenance and cost of education benefits
 - To attract best minds to medical career, regardless of previous economic status
 - To support schools with imaginative programs
 - To encourage attitudes of social responsibility in professional leaders who will come out of such a program
 - B. Increased construction of facilities for research and education is of critical importance
 - To support existing talents in research and research training
 - To anticipate the manpower requirements of the future
 - To encourage strategic thinking for bold new programs
 - C. Government responsibility for basic problems in scientific and medical communication and publication
 - To increase the effectiveness of current research
 - To reduce the gap between basic advances and their practical application
 - To inform the public, and the legislative and executive branches more promptly for aggressive policy and implementation

1. NATIONAL ACADEMY OF MEDICINE, (HEALTH). For many years, the National Academy of Sciences has been an important force in the furtherance of science and an enlightened science policy. Although it is (now) primarily an honorary body, and many of its technical advisory functions have been taken over within the government, it still continues to play an important role in the formulation and criticism of science policy. It has been particularly effective in drawing attention to neglected areas of science for which there had not been adequate institutional representation in the government -- e.g. radiation hazards to health; oceanography, the IGY and space research programs. Above all, it represents excellence in science to the public. A comparable organization is lacking in Medicine, and by default the AMA plays an analogous role, with well-known political consequences of its preoccupation with medical economics.

A NATIONAL ACADEMY OF MEDICINE (HEALTH) could be established by executive action, along lines similar to those of the Academy of Sciences, for the stated purpose of establishing a group of the highest reputation, and of independent responsibility, to advise the executive on call and to raise new issues on its own initiative. Its establishment would automatically give an authoritative voice to a segment of American Medicine which is at the same time the most important in its contributions to medical knowledge, technique, teaching and administration, and the most enlightened in its sense of social responsibility. Several other existing advisory groups, the National Health Councils, do important work, but are dispersed and no one has the stature or public recognition to do the Academy's job. An indirect service of the Academy would be to complement the role of the Science Academy as a means of recognition of achievement in academic medicine, which includes clinical service, research and teaching as well as basic science.

By analogy with the Science Academy, the initial membership might be drawn from leaders in medical education who would then expand the base as must be done to include the outstanding representatives of private practice on the basis of competence and reputation, not group politics. The Academy need not, however, be confined to licensed physicians, but should recognize competence in basic sciences, related professions -- e.g. dentistry, public health -- administration and indeed every area that can serve national health policy in a professionally informed way. Such an academy should rightfully inherit the initiative for public information and advice to national policy which is now slumbering in professionalized groups. It should have an impact on national health policy that would long survive the national administration that had set it up as a corporate body.

Among the functions of the Academy would be a continued re-evaluation of the role of the physician and the ways to improve his effectiveness. The cost of medical education and the forecast shortage of qualified doctors requires a vigilant re-examination of the physician's functions and of the ways of maintaining his professional standards on the one hand, and his effectiveness, on the other. Other related questions that should be within the purview of the Academy would include (a) the doctor's responsibility for continued postgraduate training (b) improving the accuracy of other sources of new medical information, for example, drug company detail work (c) the effectiveness of Specialty Board criteria (d) the effectiveness of contemporary programs in undergraduate medical education, and particularly the desirability of specializing them. (If there were an urgent shortage, would there be a plan for an abbreviated program for assistant practitioners? Should a prospective psychoanalyst follow the same undergraduate curriculum as a surgeon?) (e) What are the true costs of clinical education and to what extent should private patients used for teaching bear the burden of increased costs of didactic procedures. (f) The disproportion of physicians for medical care in metropolitan vs. country areas. (g) How to cope with the problems of congenital and chronic disease, of accidents, and of mental disease which are becoming relatively more menacing as we learn how to deal with many forms of acute illness.

2. PRESENT STATUS OF HEALTH RESEARCH AND EDUCATION

This is very well summarized in a series of reports (footnote 1, 2, 3) which would be an admirable basis for continued action. But the executive in previous administration has been demonstrably behind hand - the NIH allocation may be the only one which Congress has repeatedly increased over the Bureau of the Budget recommendations.

The present status of medical research is not overtly strained - most qualified investigators can get a level of support that would have seemed very gratifying ten years ago but we should not be content with meeting the evident standards of the historical past. A more serious situation applies to physical facilities - the brick and mortar that so many patrons sneer at, but which is so essential to house progressive research. In addition, present levels of funds still inhibit (1) more comprehensive projects involving, e.g., inbred animals and especially larger animals (2) research on human populations, especially genetics (3) many areas of clinical research entailing large expenses in the maintenance of patients for direct study of disease in man (4) the adequate exploitation for routine application of innovations in electronic engineering or large computers.

If we can still recognize unfilled goals in research, we should be even less complacent of our efforts in education, at all levels which do not match our present investment, much less our short term needs, in research and practice. These needs will soon be too desperate to allow the luxury of wasting any of the intellectual resources of our youth.

¹Bayne-Jones Committee, June 27, 1958. The Advancement of Medical Research and Education Through the Department of Health, Education, and Welfare. Final Report of the Secretary's Consultants on Medical Research and Education.

²Bane Committee, October 1959. Physicians for a Growing America. Report of the Surgeon General's Consultant Group on Medical Education. U.S. Department of Health, Education, and Welfare.

³Jones Committee, May 1960. Federal Support of Medical Research. Report of the Committee on Consultants on Medical Research to the Subcommittee on Departments of Labor and Health, Education, and Welfare.

2A. MERIT SCHOLARSHIPS FOR MEDICAL EDUCATION. The top twenty per cent of medical school applicants should be eligible for full scholarship support including maintenance and tuition equal to the actual cost of education. Excellence of qualification should be the only criterion as the program should be oriented as a national investment in quality rather than a charity. Criteria of need are impossible to administer without an offensive bureaucratic machinery and are rarely altogether fair. (In any case, need we go beyond the progressive income tax as the basic technique of social adjustment?)

Such a program would be a powerful incentive for maintaining the high quality of medical students, particularly if the total number of places for them is to be increased. At the present time, the graduate schools, with higher levels of fellowship support, are to a large degree competing for the best students. This competition is a healthy one but the outcome should be governed by the suitability of the student for a particular career and not be distorted by differing economic incentives.

The fellowship program should also help to attract more students from less privileged economic groups and to protect their idealism from the strains of serious economic hardship which now face a prospective physician. The present system, with the tremendous investment that must now be made in a medical career may help to account for the over-proprietary attitudes of some segments of the profession.

2B. FACILITIES FOR HEALTH RESEARCH AND EDUCATION.

Construction of improved facilities for existing programs is urgently needed to make effective use of our reserve of talent in gaining new knowledge and in multiplying this talent in the training of new scientists and physicians. Existing programs (e.g., Health Research Facilities Act) suffer not only from limitations in funds and in duration but also in concept. A bold program is needed with the following remedies:

- (1) Greater scope in funds and time
- (2) Review of matching requirements: (a) proportion (b) replacement by loan or lease for amortization (c) contingent awards to attract matching funds rather than requiring their prior accumulation
- (3) Broadening of scope to overcome arbitrary separation of research from graduate and clinical training functions

Such a program would have the additional virtue of encouraging strategic thinking for nationally important goals on the part of our universities; their staffs are now too preoccupied with fragmentary tactics of supporting their existing obligations. The Secretary of Health, Education and Welfare should have a special office devoted to reviewing new ideas that do not fall within established patterns of federal grants, and warrant ad hoc consideration on their merits.

2C. SCIENTIFIC COMMUNICATION AND PUBLICATION.

Scientific research is rapidly outgrowing its methods of communication (which have changed very little in three centuries); the clumsiness of traditional methods of publication is already a serious drain on the effectiveness of research - probably more than most investigators realize - especially in "hybrid" disciplines which override traditional classifications and must rely on a wide range of recorded information. The situation is bound to become more urgent with the overall rise in scientific productivity throughout the world. Not only does the serial delay in the publication and retrieval of information impede new work in science, and its useful application; it also has serious effects on public policy as many facets of scientific information may take months for critical publication, although oversimplified accounts may appear in the press. As a related example, a physician may have to rely on sometimes biased self-interested reports from

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drug company sources for months before objective studies on a drug can have reached publication, and additional months before he can have acquired access to them.

Unfortunately, a policy on scientific information formulated by PSAC for the previous administration has argued that "The case for a Government-operated, highly centralized type of center can be no better defended for scientific information services than it could be for automobile agencies, delicatessens, or barbershops."¹

This absurd equation, which would be at least as plausible for the postal service and the census, and must be founded in bureaucratic jealousies within and outside the government, should be reversed before our system of scientific communication collapses of its own weight and cumbersomeness. Perhaps it has already collapsed if we consider the present importance of verbal communication, i.e., rumor, in science. No agency short of the government can cope with this immense problem as is so necessary for our society to materialize its investment in scientific advance.

¹PSAC Report on "Improving the Availability of Scientific and Technical Information in the United States." Released from the White House, December 7, 1956.

Suggested language for address

---on health research and national academy of health---

Over the past years the federal government has furnished increasing support to research in the health sciences for the lasting benefit of the citizens of this country and of the whole world. The National Institutes of Health administer a program of research support now budgeted at over \$400,000,000 which has been indispensable to the furtherance of man's attack on disease. Other agencies are also involved in medical research, in the protection of the public health, in the administration of service hospitals, in guarding against the pollution of our water, our food and the air we breathe. We can hardly abandon the leadership our country has attained in the field of health, and the gaining of the scientific knowledge which is one of our most valuable treasures, though freely given the whole world. Indeed to make the best use of new knowledge in other fields -- in electronics, in chemistry, in physics -- and to speed their application to problems of health we must nurture a steady growth of medical and basic scientific research, consistent with the growth of our whole economy which, in turn, benefits so much from these advances.

The scope of this effort, and the technical complexity of its content, mean that we must rely heavily on the judgment of the best minds of the country in planning and executing this program. For many years, since Lincoln's administration the National Academy of Sciences has served a two fold purpose -- to honor the achievements of men of science elected to its distinction, and far more important to furnish a continuing source of disinterested, competent advice on questions that need unique insight into problems of science. To serve an analogous function in the field of health I have requested the Surgeon-General of the Public Health Service to nominate the founding members of a National Academy of Health -- to honor the most distinguished leaders of American medicine, and related fields of basic medical science, public health and other health professions, -- and to charge this Academy to advise the American people, through the office of the Presidency, of the best measures we should take in our struggle against disease.

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